Presentation summary

• Nepalese media in food safety issues
• Food safety-Nepalese issues
• Food control system in Nepal
• Gaps/Areas need to improve
Food safety problems in Nepal (raised by media)
Milk: Most of the market milk is substandard
Sweets: Most of the sweets sold are unhygienic.
Vegetables: Available in the market contain pesticides

Rice: Distributed by WFP is not of good quality
Meat and meat products contain VDR.
Beverages

Imitating products are in the market
Mineral water contaminated and contain filth in it.
Pesticides

Chemical pesticide use is in rise
Poisonous mushrooms

Poisonous mushroom claims death of many people in Nepal
Consequences of consumption of unsafe food—Street food consumption increases burden of diseases
Consequences in trade

- KFC is willing to use Nepalese chicken but of quality importing from Brazil
Consequences: become a political agenda in Nepal
Consequences

Due to consumption of unsafe food in the marriage festival, people are getting sick
Recent work by the Government

One of the popular sweets called Gundpank shop is under Government custody
Dispose of unsafe food- by Government agencies
Dispose of unsafe food by Government agencies
Human resources in Government are inadequate: only 40 in Nepal
Annual Report 2011

Department of Food Technology and Quality Control: A food control agency in Nepal
Trend of Sub-standard Samples (on the basis of Collected Samples)

Adulterated Sample Percent (%)

Fiscal Year
Trend of Sub-standard Samples of Milk
Trend of Sub-standard Samples of Ghee

![Graph showing the Trend of Sub-standard Samples of Ghee from 1961/62 to 1966/67. The graph indicates a decrease in the sub-standard percentage over the years.](image-url)
Trend of Sub-standard Samples of Mustard Oil

Sub-standard Percent %

Year: 61/62 62/63 63/64 64/65 65/66 66/67
Values: 24.2 37.3 29.3 95.5 86.0 54.8
Trend of Sub-standard Samples of Soybean Oil
Trend of Sub-standard Samples of Processed Drinking Water

Sub-standard percent %

61/62  62/63  63/64  64/65  65/66  66/67

6.4  14.3  50.9  51.5  39.3  47.1
National Food Control System-DFTQC Principles

- Legislation
- Food Control Management
- Inspection
- Information, Education, Communication
- Laboratories, Surveillance/monitoring
Major issues in food safety

Issues in Nepal

• Microbiological hazards
• Chemical hazards
• Surveillance of foodborne disease
• New technologies
• Capacity building
Microbiological hazards

• significant increase have been reported over the past few decades.
• *Salmonella* spp., *Campylobacter* spp, enterohaemorrhagic *Escherichia coli*
• bovine spongiform encephalopathy
Chemical hazards

Chemicals are significant source of foodborne illness - associated with immune, endocrine and developing nervous systems in the human system.

- natural toxicants such as mycotoxins
- environmental contaminants such as mercury, lead, radionuclides and dioxins
- naturally occurring chemicals in plants, such as glycoalkaloids
- pesticide and veterinary drug residues
Surveillance of foodborne disease

• Most of foodborne disease cases are not reported- implementation of effective solutions often fail.

• Effective control of foodborne disease must be based on evaluated information.
New technologies

• potential public health effects of new technologies have raised concern.

• New technologies such as genetic engineering, irradiation of food, ohmic heating and modified atmosphere packaging.
Capacity building

• developing countries are poorly equipped to respond to existing and emerging food safety problems.

• lack technical and financial resources
  – an effective institutional framework
  – trained manpower
  – sufficient information about the hazards and risks involved.
Nepalese Context- food safety

• system based on a multiple agencies executing different legislations related to food safety.

• the government agency for execution of food legislation (Food Act 1967) is Department of Food Technology and Quality Control.

• existing food legislation is not adequate to address the present day realities of food safety issues, because
  – not directed by the risk assessment principles.
  – human resource in food control inadequate.
  – food contaminants analysis facility is poor.
Nepalese Context- food safety

• food adulteration rate in Nepal is 15.6% for the fiscal year 2011 (DFTQC 2011)
• processed drinking water, processed milk and refined edible oil are the major sub-standard food products in the market.
## Legislations and agencies - food safety

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<td>Pesticide Regulation Act 1991</td>
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Gaps - Nepal

• Food safety policy
• Surveillance systems of foodborne diseases
• Risk assessments
• Risk communication and advocacy
• International and national cooperation
• Capacity building
References

• DFTQC (2010) "Annual Bulletin" Department of Food Technology and Quality Control, Nepal
• FAO/WHO (2003) "Food Hygiene : Basic Texts" 3rd edition, Rome Italy
• Government of Nepal, Food Act 1967, Food Regulation 1971
• Koirala P Tamrakar A S (2010)" Study on pesticide residue monitoring program and quarantine system of some selected Asian countries" JFSTN 5:23-26
Thank you